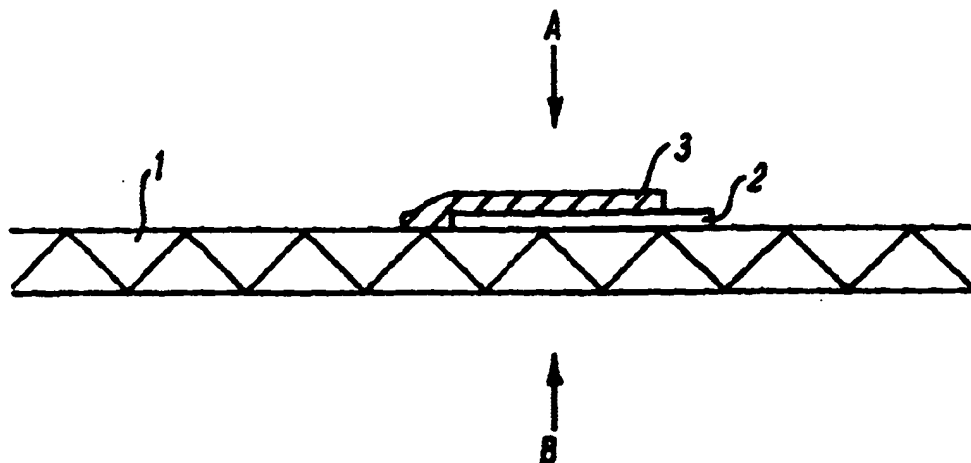




## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification <sup>6</sup> : B41M 3/00, 1/18, B44C 1/22		A1	(11) International Publication Number: WO 98/17480
			(43) International Publication Date: 30 April 1998 (30.04.98)
(21) International Application Number: PCT/GB97/02788		(31) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, ARIPO patent (GH, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG).	
(22) International Filing Date: 24 October 1997 (24.10.97)			
(30) Priority Data: PCT/GB96/02600 24 October 1996 (24.10.96) WO (34) Countries for which the regional or international application was filed: AT et al. PCT/GB97/01175 30 April 1997 (30.04.97) WO (34) Countries for which the regional or international application was filed: AT et al.			
(71) Applicant (for all designated States except US): CONTRA VISION LIMITED (GB/GB); Hampton House, 37B Bramhall Lane South, Bramhall, Stockport, Cheshire SK7 2DU (GB).		Published With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.	
(72) Inventors; and (75) Inventors/Applicants (for US only): HILL, George, Roland (GB/GB); 14 Pownall Avenue, Bramhall, Stockport, Cheshire SK7 1HE (GB). GODDEN, Mark, David (GB/GB); 33 Watch Elm Close, Bradley Stoke, Bristol BS12 8AL (GB).			
(74) Agents: HILL, Richard et al.; Wilson Gunn M'Caw, 41-51 Royal Exchange, Cross Street, Manchester M2 7BD (GB).			

(54) Title: METHOD FOR FORMING DURABLE IMAGES ON SUBSTRATES



## (57) Abstract

A method of imaging a substrate is disclosed, the method consisting of applying a first layer to the substrate to form a "print pattern" and a second step of presenting an "addressed design" to the substrate both within and outside the area of the print pattern. In the method of the invention, within the print pattern the addressed design is formed into a "durable image material" forming at least a part of the design layer and outside the print pattern, the addressed design does not form a durable image material.

**FOR THE PURPOSES OF INFORMATION ONLY**

Codes used to identify States party to the PCT on the front pages of pamphlets publishing international applications under the PCT.

AL	Albania	ES	Spain	LS	Lesotho	SI	Slovenia
AM	Armenia	FI	Finland	LT	Lithuania	SK	Slovakia
AT	Austria	FR	France	LU	Luxembourg	SN	Senegal
AU	Australia	GA	Gabon	LV	Latvia	SZ	Swaziland
AZ	Azerbaijan	GB	United Kingdom	MC	Monaco	TD	Chad
BA	Bosnia and Herzegovina	GE	Georgia	MD	Republic of Moldova	TG	Togo
BB	Barbados	GH	Ghana	MG	Madagascar	TJ	Tajikistan
BE	Belgium	GN	Guinea	MK	The former Yugoslav Republic of Macedonia	TM	Turkmenistan
BF	Burkina Faso	GR	Greece	ML	Mali	TR	Turkey
BG	Bulgaria	HU	Hungary	MN	Mongolia	TT	Trinidad and Tobago
BJ	Benin	IE	Ireland	MR	Mauritania	UA	Ukraine
BR	Brazil	IL	Israel	MW	Malawi	UG	Uganda
BY	Belarus	IS	Iceland	MX	Mexico	US	United States of America
CA	Canada	IT	Italy	NE	Niger	UZ	Uzbekistan
CF	Central African Republic	JP	Japan	NL	Netherlands	VN	Viet Nam
CG	Congo	KE	Kenya	NO	Norway	YU	Yugoslavia
CH	Switzerland	KG	Kyrgyzstan	NZ	New Zealand	ZW	Zimbabwe
CI	Côte d'Ivoire	KP	Democratic People's Republic of Korea	PL	Poland		
CM	Cameroon	KR	Republic of Korea	PT	Portugal		
CN	China	KZ	Kazakhstan	RO	Romania		
CU	Cuba	LC	Saint Lucia	RU	Russian Federation		
CZ	Czech Republic	LI	Liechtenstein	SD	Sudan		
DE	Germany	LK	Sri Lanka	SE	Sweden		
DK	Denmark	LR	Liberia	SG	Singapore		
EE	Estonia						

- 1 -

## METHOD FOR FORMING DURABLE IMAGES ON SUBSTRATES

This invention relates to the partial printing of a substrate with a plurality of layers with substantially exact registration using an imaging technique for at least one layer which forms a durable image material over a suitably receptive area but which does not form a durable image material over a non-receptive area.

There are a number of visual and other functional benefits in printing only part of the surface area of a substrate. For example, it is common to partially print a substrate with one or more colours to allow the revealed substrate which is left exposed to form part of the required design.

White is the most common colour of substrate to be printed over part of its area and revealed in other parts, firstly because it is easiest to achieve the desired perceived colour of other colours if they are printed on white, especially if such colours are formed by transparent or translucent inks. Secondly, white forms a good contrast to many other colours and so renders graphic designs easily visible. Thirdly, white commonly forms a significantly high percentage of many designs. Fourthly, the mass processing of white substrates provides economy and efficiency in